

इंटरनेट

मानक

### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 13074 (1991): Code of practice for laying of bitumen mastic flooring for industries handling LPG and other light hydrocarbon products [CED 5: Flooring, Wall Finishing and Roofing]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



भारतीय मानक

द्रवित पेट्रोलियम गैस तथा हल्के हाइड्रोकार्बन  
उत्पादों के प्रहस्तन में लगे उद्योगों के लिए  
बिटुमेन फर्शबन्दी — रीति संहिता

*Indian Standard*

**LAYING OF BITUMEN MASTIC FLOORING FOR  
INDUSTRIES HANDLING LPG AND OTHER  
LIGHT HYDROCARBON PRODUCTS —  
CODE OF PRACTICE**

UDC 692.533.12 : 662.767

© BIS 1991

**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

## FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Flooring, Wall Finishing and Roofing Sectional Committee had been approved by the Civil Engineering Division Council.

This standard has been formulated with a view to provide guidance for preparation of base, for laying and maintenance of bitumen mastic flooring.

This standard shall be read in conjunction with IS 13026 : 1990 'Specification for bitumen mastic for flooring for industries handling LPG and other light hydrocarbon products', IS 8374 : 1977 'Specification for bitumen mastic, antistatic and electrically conducting grade' and IS 1196 : 1978 'Code of practice for laying bitumen mastic flooring'.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## *Indian Standard*

# LAYING OF BITUMEN MASTIC FLOORING FOR INDUSTRIES HANDLING LPG AND OTHER LIGHT HYDROCARBON PRODUCTS — CODE OF PRACTICE

### 1 SCOPE

**1.1** This standard lays down the procedure for laying bitumen mastic flooring for industries handling LPG and other light hydrocarbon products.

### 2 REFERENCE

**2.1** The Indian Standard IS 13026 : 1990 'Specification for bitumen mastic flooring for industries handling LPG and other light hydrocarbon products', is a necessary adjunct to this standard.

### 3 DESIGN CONSIDERATION

**3.1** Bitumen mastic is jointless and impervious to the transmission of moisture. In designing the bitumen mastic flooring for hydrocarbon services, consideration shall be given to the anticipated service conditions as specified in IS 13026 : 1990.

### 4 THICKNESS

**4.1** The total thickness to which bitumen mastic should be laid shall be 20 mm to 25 mm or as mutually agreed upon by both parties depending on actual conditions.

### 5 MATERIAL

**5.1** Bitumen mastic shall conform to the requirements given in IS 13026 : 1990.

**5.2** The bitumen mastic may be delivered to the site in the molten state and immediately laid.

### 6 EQUIPMENT

**6.1** The equipment shall consist to bitumen boiler, a mechanically agitated mastic cooker and other accessories. The equipment shall be used near the site, so as to prevent cooling of the molten material.

### 7 CONSTRUCTION

**7.1** The base on which the bitumen mastic is to be laid shall be stable to receive the mastic and to sustain the anticipated load on it.

#### 7.2 Preparation of the Base

The base shall have an even and dry surface which has been roughened with stiff broom or

wire or coir brush and should be free from ridges and hollows. The base may be provided with suitable slope if needed for drainage of rain water, etc.

#### 7.3 Laying

##### 7.3.1 Transport of Molten Material

The molten mastic shall be carried in flat mortar pans. The pans are sprinkled with lime stone dust, to prevent sticking of mastic. Grease or oil shall not be used.

##### 7.3.2 Spreading

Bitumen mastic should be laid in bays in one or more layer. The specified thickness be maintained by suitable hand tools, gauges, straight edges, band levels, etc.

**7.3.2.1** The bubbles formed during laying should be punctured and the area rectified while mastic is hot.

**7.3.2.2** Multi-layer work should be treated in same manner as that of single-layer, care being taken to arrange that the joints in successive layers are staggered.

##### 7.3.2.3 Protection of the surface

The laid surface shall be protected from damage due to movement of heavy load, spillage of oils, etc. Bitumen mastic surface should not be used for preparation of cement concrete mixes or mortars.

##### 7.3.2.4 Opening to traffic

The mastic flooring should not be opened to traffic until the material has cooled down to ambient temperature of the surrounding atmosphere.

### 8 REPAIRS

**8.1** Damaged area shall be cut rectangular and replaced with new mastic. Blow lamp techniques to remove damaged layer are preferred.

### 9 MAINTENANCE

**9.1** The bitumen mastic flooring requires little maintenance. Dirt and dust should be periodically removed with lukewarm water and detergent. Oils, fats and grease spilled, should be removed immediately.

### **Standard Mark**

The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

## Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 1986* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

### Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director ( Publication ), BIS.

### Revision of Indian Standards

Indian Standards are reviewed periodically and revised, when necessary and amendments, if any, are issued from time to time. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition. Comments on this Indian Standard may be sent to BIS giving the following reference :

Doc : No. CED 5 ( 4358 )

### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

## BUREAU OF INDIAN STANDARDS

### Headquarters :

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002  
Telephones : 331 01 31, 331 13 75

Telegrams : Manaksanstha  
( Common to all Offices )

### Regional Offices :

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg  
NEW DELHI 110002

Telephone  
{ 331 01 31  
{ 331 13 75

Eastern : 1/14 C.I.T. Scheme VII M, V.I.P. Road, Maniktola  
CALCUTTA 700054

37 86 62

Northern : SCO 445-446, Sector 35-C, CHANDIGARH 160036

53 38 43

Southern : C.I.T. Campus, IV Cross Road, MADRAS 600113

41 29 16

Western : Manakalaya, E9 MIDC, Marol, Andheri ( East )  
BOMBAY 400093

6 32 92 95

Branches : AHMADABAD. BANGALORE. BHOPAL. BHUBANESHWAR.  
COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI.  
HYDERABAD. JAIPUR. KANPUR. PATNA. THIRUVANANTHAPURAM.